



MOUSETRAP-POWERED MOUSE

PURPOSE: To design and build an alteration to a computer mouse that will move the mouse with the energy stored in up to five standard cocked mousetraps. The mouse will compete in a speed race over a 15-foot course over a level floor.

EVENT: The event will take place on **April 30, 2007 at 3:00 PM in room 713** (or alternative room if necessary for crowd control) on the Marysville Campus. Optional unofficial trial runs will be held at the MESA BBQ at noon in the Quad on April 18, 2007.

GROUPS/TEAMS: Contestants may enter as individuals, or as a Team of up to 3 people. Everyone is welcome.

PRIZES: Special prizes for cars with the best time(s), the best looks, the most unique engineering, the best action (wheelies, smoking tires, blazing speed, crash-and-burn, etc.).

CURRENT WORLD RECORD: Yuba College Student Record, Yuba College MESA Record and World Unlimited Record: Martin Wissink 2.3 seconds, in 2006. For more information on the past contests, see: <http://ms.yccd.edu/mousetrap/mouse2006/> <http://ms.yccd.edu/mousetrap/mouse2001/> and <http://ms.yccd.edu/mousetrap/mouse2002/>

OPTIONAL BUILDER'S PRE-MEETING: Will be held in room 713 from 11 am to 12:30pm on Wednesday April 11, 2007. Get a free mouse and hints on the designs used in the past. Ask your "what-if" questions to find out if they are legal.

RULES:

Materials - Use common household packaging discard items such as cardboard, paper, foil, boxes, cans, bottles, and simple fasteners such as staples, glue, string, tape, paint, and clothes-hanger wire. You are allowed to purchase anything you need (including mousetraps) up to a total expenditure of \$20.00. The value of items that would normally need to be purchased is included in the \$20, even if you already had them. No lighter-than-air parts or materials are allowed.

Vehicle Configuration - The intent is that the mouse looks like a powered mouse not like a mouse riding on a vehicle. The insides of the mouse may be removed, but the case, both top and bottom and the buttons must be substantially unaltered. Small holes can be cut to allow wheels or the mousetrap mechanism to pass through the case. It is not required that your mouse-vehicle be a conventional "car" with wheels; It could fly, walk, hop, etc. Aerodynamic surfaces are allowed. The size restriction is simple: Your vehicle, ready to race must fit entirely in a box 8.0 inches long by 5.0 inches high by 5.0 inches wide. If the vehicle has a flexible "tail" (for instance, if made from the mouse cord) it can be coiled up to fit in the box. When your vehicle is at the start line, nothing (except the cord, the "tail", if you use one) may extend beyond the theoretical 8x5x5 "box".

Power - Up to five of standard-size mousetraps ("Victor", "McGill" or equivalent) may be used, but the springs must fit inside the mouse and they must travel with the vehicle. The traps must be the sole form of power. No human push, no rubber bands, no chemical or compressed gas rockets, etc. However, energy stored in the traps may be transferred to any other form of energy once you release your vehicle (for instance, the trap could spin a flywheel or it could stretch a rubber band after the start). The trap(s) can be stripped of all parts (the wood, latch, etc.) to fit them inside the mouse. Only springs from actual standard mousetraps may be used. While the spring(s) must be inside the mouse, the bale ("power arm") of the trap may be outside the mouse. The bale and any extensions to it must conform to the size ("box") rules.

General - The course will be laid out on a smooth horizontal floor. A vehicle must be released from a location so that it is entirely behind the start line, and is considered past the finish line only when all parts of the vehicle are past the 15-foot distance. Any parts or debris discarded during a race or left detached from the vehicle are still considered part of the vehicle. The owner may release his/her own vehicle, but must not give it any extra push. The official judge will decide any controversies. Call Steve Klein, 741-6911, for more information.